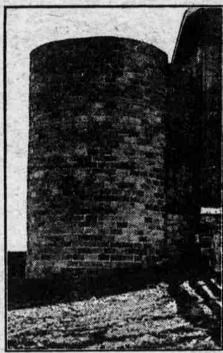
ROFITABLE DAIRYING By HUGH G. VAN PELT

Judgment in Feeding

Dairy Expert Iowa State Dairy Association

results from the dairy herd judgment of the very best and cheapest feeds must always be used in selecting and that can be supplied to farm animals. preparing the feeds which compile the ration. It is not a new idea that this year in the neighborhood of 1,200 cheap feeds are oftentimes more stimulating to great results than are those feeds which sell for high prices. There was a time when the feeder of the corn belt was misled into believing that there were certain feeds that if fed in small amounts had the power of producing great results. Consequently he was led to purchase in large amounts patent stock foods which cost him anywhere from \$100 to \$200 per ton. Ten years ago there were thousands of tons of such feed sold annually, but greatly to the credit of the present-day farmer and feeder, there is being very little of this food sold at the present time. The farmer realizes that all foodstuffs are made up of the same kinds of nutrients;



New Tile Silo at Iowa State College.

namely, protein, carbohydrates, fat and mineral matter. The only difference between any of these feeds is in the proportion of these different nutrients. When the patent stock foods were analyzed it was found that they contained less protein, or the sold for the purpose of forming a balanced ration when fed with corn. The chief value of the stock foods rested, of course, in their stimulating and appetizing power. In other words, these foods had the power of adding palatability to the ration, but the intelligent, successful feeder of today finds it possible to so mix his ration as to make it sufficiently palatable without the use of these condiments costing eight or ten cents per pound.

Six Points to Consider in Feeding. Besides the consideration of quality and quantity, there are six essential points to be considered in formulating rations for the herd. They must be palatable so that the cow will eat in large amounts and waste very little of the feed. They must contain a sufficient amount of digestible nutrients and for this reason concentrates must be fed in addition to hay, straw and grass. They must be inexpensive in order to insure a profit. There must be a sufficient amount of variety in order that the feeder may change his ration from time to time and keep the cow always ready for her next meal. There must be a certain amount of succulence summer and winter if the ration is to accomplish the best results.

The Silo.

One of the chief sources of all of the corn beit as does corn sllage and went at once into his enormous silos I am confident that the time is close and was in good condition to afford at hand when siles on the farm will the greatest amount of feeding nube as plentiful as corn cribs are trients in the most palatable and diat the present time. It has other ad- gestible form. The remainder of his vantages in that it is useful in feeding corn was cut up at once and put into other farm animals. It supplies in shocks to be shredded and the better other farm animals. It supplies in the winter time the succulence of the June pastures. It is convenient in that the reder is not compelled to go to the cornfield and pick the dry cornstalks out of the snow on cold, frosty mornings. Experiments prove that milk and butter fat can be produced for at least one third less cost where corn slings is used than where the spring in the form of fertilizing concew must subsist wholly on dry feed. Stituents for the upbuilding of the The farmer of the corn belt, has during fields from which the crop itself was the past year, demonstrated that he taken

To accomplish the most profitable is aware of the fact that sliage is one In lowa there are to be found up to silos on farms and during the present year there have been sold and erected on other Iowa farms in the neighborhood of 1,200 more and likely it is that during the coming year the number of silos in this state will be again doubled. The chief objection to the silo at the present time, and, in fact, the only objection that the writer has heard for some time, is that the first cost is a considerable expense-which is true. However, if one stops to compare the actual cost of storage space of foods for farm animals it is readily found that the silo is the cheapest structure that can be built upon the

Capacity of the Silo.

It is a well-known fact that 400 cubic feet of barn space is required for the storage of one ton of clover hay; 50 cubic feet of silo space will suffice for the storage of one ton of silage; therefore it requires eight times as much storage space in the hay mow to store one ton of feed as it does in the silo. However, corn silage contains 80 per cent. of water and for this reason the silo will not contain as great an amount of dry matter in comparison, but we do find that one cubic foot of silo space con tains as much dry matter as two cubic feet in the hay mow, and reduced to terms of digestible feeding nutrients, which in reality is the standpoint from which all foodstuffs should be figured, we find that one cubic foot of silage space will hold as two and one-third oubic feet of space in the hay mow. In consequence, if we were to build a hay mow that would hold as much feed as a 100-ton silo, it would be necessary to build a barn with a storage space for 800 tons of hay, or if we were to supply the same storage capacity as is found in a 100-ton silo for the storage of dry matter, a barn with a capacity of 200 uring further, if we were to build a barn with the capacity for holding digestible feeding nutrients in amounts that farmers in older countries are as great as could be stored in a 100- doing this very thing on land which most expensive feeding nutrient, than ton sile, it would be necessary to rents annually for as much as a large did oil meal, cottonseed meal, gluten build a barn with the capacity to hold portion of the land in the corn belt St. Louis, secretary; Harriett L. feed and many of the commercial 233 1-3 tons of clover hay. This winfoodstuffs upon the market that are ter in particular demonstrates more profits out of the dairy business at the clearly than most winters the value of present prevailing prices of both dairy a silo and the feeding nutrients that products and food stuffs, but it is

There is one distinct advantage in corn silage which is not enumerated in its feeding analysis. That is the moisture or succulence which it contains. The American feeder has not realized in the past the great value of succulence added to the ration of his farm animals. It is a common saying that animals fed largely for a long-time on dry corn become burnt out, and true it is that their digestive apparatus has become more or less impaired. This result is overcome by the feeding of succulent foods, which fact has been recognized by feeders of the older countries for many years. Rations for dairy animals as well as for other farm animals in Scotland. England, Ireland and other countries across the water are made up largely of beets, mangoes and carrots.

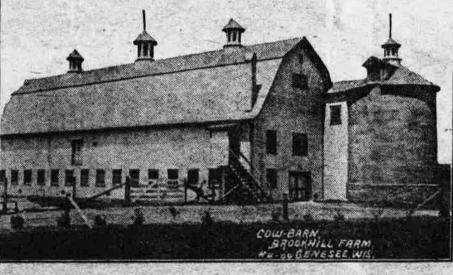
Prominence of the Sile.

In the eastern sections of the United States, or more truly in the dairy districts, there is seldom a farm without one or more silos, and the day is rapidly coming when the man without a silo will have a difficult time in making a profitable competition with the one who resorts to the use of the silo. This is true of all farm products and especially is it true of dairy products if the consumer has been led to the point where he is paying extremely large prices. As a matter of fact, he



Improved Silo.

many digestible feeding nutrients as is paying for dairy products almost as much as he can afford to pay and the dairy farmer should begin to realize that he is receiving extremely large prices for the commodities which he is producing. It is a shame and a disgrace for the farmer in the corn belt to be compelled to say that he cannot afford to produce butter for an average price of from 25 to 30 cents a pound the year through, or milk tons of hay would be necessary. Fig. averaging when it reaches the consumer more than five cents a quart. This statement is in view of the fact sells for. It is possible to make great



can be saved through its use. It was estimated that in the middle of January there was remaining in the cornfields of the corn belt from 20 to 25 per cent, of this last year's crop which could not be harvested on account of the severe snowy weather. As a result of this, much of this year's crop of corn was ruined and wasted. One of the largest corn raisers in Iowa who is also a dairyman these points is the silo. There is no and milks from 60 to 75 cows, had all feed more palatable, more easily di- of his corn crop under shelter where gested, affording more of a variety it could not be wasted in view of the and costing as small an amount in fact that over 50 acres of his corn

necessary for the farmer and dairyman to surround his efforts with better conditions in the form of better cows, better feed produced more intelligently and combined more thoughtfully. In other words, the time is close at hand when the up-to-date farmer will be vastly different from the farmer and dairyman that we have known in the past. He will place himself more in a position of the business man, the merchant or the manufacturer. He will be acquainted with every individual animal upon his farm even as is the merchant acquainted with everyone of his customers. He will be acquainted with every feature pertaining to every acre of ground of which his farm is made up, even as the manufacturer is acquainted with every machine in his factory. Whenever this time comes conditions on the farm will not only be more intensive but methods will be more diversifled and although it is difficult to predict that prices of farm commodities will be much greater than they are at the present time, it is a certainty that farms will be more valuable and the commodities that are now being produced upon the farm, especially the dairy products, will be produced for a ch less cost per pound than at the

MISSOURI STATE NEWS

No Cross State Flight. Although \$12,000 was raised as a prize and the route was laid out for the trans-state aeroplane flight from St. Louis to Kansas City, to have been begun August 24, the aerial attraction, which was inspired by the board of immigration, has been called off indefinitely. Failure of the committees to secure aviators is given as the reason why the flight has been abandoned. To those towns along the proposed route, where it was planned for aviators to land temporarily, and which had contributed toward the event, Chief Immigration Commissioner John H. Curran sent letters informing the commercial bodies of the towns that the flight would not be held, as advertised. The towns over which the flight was to have been made to Kansas City were St. Charles, Montgomery City, Mexico, Sturgeon, Huntsville, Carrollton and Lexington, thence to Kansas City. While not attempting to criticise, Commissioner Curran holds that no blame for the postponement of the flight can rest on the immigration board, because the board, he says, secured the money according to agreement and laid out the route, and ...e aero clubs of St. Louis and Kansas City were to perform their part of the programme by securing the aviators.

A Welcome of Other Days. The Show-You congress, to be held at Moberly, September 7, 8, and 9, will have as a woman's department a tent with the appearance in the interior of an old-fashioned Missouri cottage. An old-fashioned well, sweep and curb, from which sparkling Missouri water will be handed out to thirsty ones, in gourds, will also be shown. Designed to be a retreat for those who are home-comers to Missouri, a further feature will be a lawn stretching from the tent, and on this will be placed settees and hammocks, where rest can be taken. A delegation of northern Missouri women will have charge of the tent, and, to still further carry out their idea of depicting olden days, will wear homespun linsey aprons and oldfashioned poke bonnest. They will give souvenirs to visitors and a quartet of girls will at intervals sing the favorite songs of half a century ago. Spinning wheels and looms will also be placed in the cottage to give it a more realistic appearance.

Wrights Elect Officers.

The Wright Family Association of America, composed of 175 persons, in family reunion which met at Columbia elected these officers: J. Kelly Wright, Columbia, president; W. D. Wright of Wright, columbia, assistant secretary; Paul M. Wright of Columbia, trezsurer. The officers will call the next reunion two years from now, and will serve until then. The Wrights are descended from Adam Wright of New England, who lived ten gentrations ago and married Jane Hugart, removing to Botetourt county, Virginia. They had 13 children, eight daughters and five sons. From these all the Wrights are descended. There are known to be over 400 members of the family scattered over the United States.

Schoolmate of Daughter.

Harry R. Williams of Jackson, United States consul at Costa Rica during Cleveland's administration and a graduate of the University of Missouri in 1884, has made arrangements to enter the agricultural college of Missouri university this fall, and will attend lectures regularly, while his daughter, Miss Irene Williams, is a student in the college of arts and science. She will be a freshman. Her father will be a special student.

To Inspect Ozark Schools.

To inspect the rural schools in the heart of the Ozarks, Dean W. W. Charters, of the School of Education at the University of Missouri, and Prof. R. H. Emberson of the chair of rural education left to spend two weeks in Stone, Taney, Ozark and Douglass counties. Most of the traveling they will do will be on foot, horseback or in farm wagons.

To Tap Harrisburg Coal Field.

J. L. McElree, representing the St. Louis and Kansas City Electric Railway Company, has made first payment on the thirty-year leases which the company holds on a body of 1,000 acres of coal lands near Harrisburg, Boone county, A spur track will be built from Columbia to Harrisburg to tap the coal fields. A blanket vein 4 feet thick is known to exist.

A M. S. U. Teacher to Minnesota. Dr. E. T. Bell, assistant professor of anatomy in the school of medicine of the University of Missouri, has been notified of his election to a similar position at the University of Min

A TRAIN LOAD OF TOBACCO.

Fwenty-four Carloads Purchased fer Lewis' Single Binder Cigar Factory.

What is probably the biggest lot of ill fancy grade tobacco held by any factory in the United States has just been purchased by Frank P. Lewis, of Peoria, for the manufacture of Lewis' Single Binder Cigars. The lot will make twenty-four carloads, and is selected from what is considered by experts to be the finest crop raised in many years. The purchase of tobacco is sufficient to last the factory more than two years. An extra price was paid for the selection. Smokers of Lewis' Single Binder Cigars will appreclate this tobacco. -Peoria Star, January 16, 1909.

Deduction in a Street Car. The Heavyweight-Pardon me, did step on your foot, sir? Coogan-If yez didn't, begorry, then the roof must how fell on it.-Puck.

Dr. Pierce's Pieasant Pellets regulate and invig-orate stomach, liver and bowels. Sugar-coated, tiny granules. Easy to take as candy.

Isn't it shocking when you hear a nice man complain of anything.



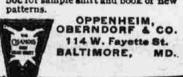


You know that if a manufacturer makes a garment that he is willing to guarantee, it must be an out-of-the-ordinary value and worth looking into. That's the case of

That's the case of
THE CHAMOIS SKIN KHAKI
WORK SHIRT
It is made of the ideal shirting fabric, by skilled labor—a special operator for each separate part, and so
confident are we of its wearing qualities that we GUARANTEE it to you
OUTRIGHT—another shirt for every one that rips.

If you want a REAL WORK SHIRT you want Chamois Skin. It's roomy and well fitting; attractive in pattern and color. It is a standard shirt at a sta ard price-50c-a garment that can ALWAYS be relied upon.

Your dealer can supply you, if not send his name, your collar size and 50c for sample shirt and book of new



Your Liver is Clogged up

That's Why You're Tired Out of Serts Have No Appetite CARTER'S LITTLE LIVER PILLS will put you right in a few days. They do mess, Indigestion, and Sick Headache.

SMALL PILL, SMALL DOSE, SMALL PRICE Genuine muster Signature

STOCKERS & FEEDERS

Choice quality; reds and roans, white faces or angus bought on orders. Tens of Thousands to select from. Satisfaction Guaranteed. Correspondence Invited. Come and see for yourself.

National Live Stock Com. Co. Kansas City, Mo., St. Joseph, Mo., S. Omaha, Neb.

"Having taken your wonderful 'Casca-rets' for three months and being entirely enred of stomach catarrh and dyspepsia. I think a word of praise is due to 'Cascarets' for their wonderful composition. I have taken numerous other socalled remedies but without avail, an find that Cascarets relieve more in a c than all the others I have taken would

108 Mercer St., Jersey City, N. stable, Potent, Tas rer Sicken, Westen